

Type habitat. Associated with *Dendroctonus frontalis* Zimmerman.
Type locality. Gloucester County, Va.
Type. USNM no. 1770.

REFERENCES

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THE GENUS *AMMOPHILA* IN THE WEST INDIES
(HYMENOPTERA: SPHECIDAE)

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ABSTRACT—Two species of *Ammophila* are recorded from the West Indies, *A. apicalis* Guérin-Ménéville from Cuba, Jamaica, and Long Island in the Bahamas, and *A. cybele*, n. sp., from Cuba. *Ammophila cybele* belongs in the *urnaria* species group, and *A. apicalis* belongs in the newly proposed and characterized *nigricans* species group.

Until now the genus *Ammophila* Kirby in the West Indies has had only one described representative, *A. apicalis* Guérin-Ménéville. This species has been recorded only from Cuba. Dr. Pastor Alayo Dalmau of the Academia de Ciencias de la República de Cuba, La Habana, has, however, discovered a second Cuban *Ammophila* in the xeric southeastern coastal area of the island.

The wasp fauna of the West Indies is still imperfectly known, and many of the islands have been poorly collected. In this paper *Ammophila apicalis* is reported for the first time from non-Cuban localities, namely Long Island in the Bahamas and Jamaica. The presence of the genus on an island as small as Long Island indicates that *Ammophila* should also be found on some of the other West Indian islands, especially the large, diverse island of Hispaniola. Because of the paucity of data on the *Ammophila* of the West Indies it seems appropriate to supplement the description of the new species with a summary of what is known about *A. apicalis*.

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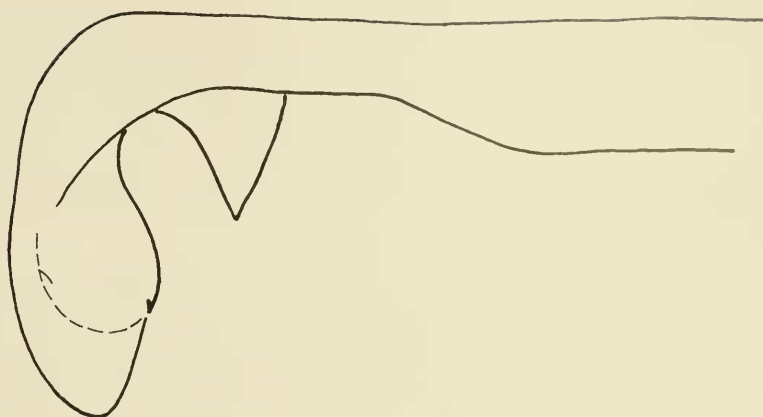


Fig. 1, left penis valve of dissected aedeagus of *Ammophila cybele*, n. sp.

Ammophila cybele Menke, n. sp.

HOLOTYPE: MALE: *Length*: 17 mm. (male paratype range, 16–21 mm.)

Color: Black; tegula brownish; petiole sternite brown, petiole tergite red laterally, black above; gastral sternites I–IV red, tergites I–II red but each with a narrow, median, black stripe, tergites III–IV red laterally, III with a dorsal black spot which broadens apically, IV with a similar but even broader black spot; wings clear, veins dark brown.

Vestiture: Gena adjacent to outer orbit covered with dense appressed silver hair; collar, scutal furrow, and propodeal enclosure with appressed silver hair; mesopleuron with a dense band of appressed silver hair along mesopleural suture from base of midcoxa to top of hypoepimeral area, subalar area also with appressed silver hair; inferior metapleural area at base of hindcoxa with a patch of sparse appressed silver hair, patch continued on propodeal side as a dense band which broadens toward and ends anterior to the propodeal spiracle; propodeum with a patch of appressed silver hair lateral to petiole socket.

Structure: Labrum rounded; collar moderately micropunctate; scutum and pleura densely macropunctate; scutellum moderately macropunctate and weakly ridged; propodeal side rugosopunctate; midtibia with two spurs; penis valve of dissected aedeagus as in fig. 1.

FEMALE: *Average length*: 20 mm., range 19.5–21 mm.

Color: Petiole and gaster entirely red except for a narrow, median black spot on tergites IV–V, petiole sternite sometimes brownish red; rest of body as described for male.

Vestiture: As in male with addition of appressed silver hair on vertex, posterior margin of scutum, anterior half of scutellum, and a rather diffuse band of appressed silver hair extending forward from midcoxa to anterior margin of mesopleuron just beneath pronotal lobe.

Structure: Labrum rounded but with a medioapical projection; clypeal disk slightly bulging, median free margin produced, sinuate, lateral tooth prominent, acute; inner orbits slightly converging below; other details as in male.

TYPES: Holotype male: Juraguá, Oriente Prov., Cuba, May 1955, Pastor Alayo D. Paratypes: Cuba, Oriente Prov.: Juraguá, May 1955, 1 ♂, 1 ♀, Pastor Alayo D.; Playa Juraguá, Cancey, July 1955, 1 ♂, Pastor Alayo D.; Playa Juraguá, June 1963, 1 ♂, 1 ♀, Zayas, Valdes, and Garcia; Ciudadamar, Santiago de Cuba, July 1955, 1 ♀, Pastor Alayo D.

The holotype and several paratypes will be deposited in the Academia de Ciencias de la República de Cuba, La Habana. Additional paratypes will be placed in the U. S. National Museum, Washington, D. C. and my collection.

DISCUSSION: *Ammophila cybele* belongs to the *urnaria* group, which was defined by me in 1966. The extensive appressed silver hair on the head and thorax of *cybele* contrasts sharply with the black ground color, and makes this a striking and easily recognized species. None of the other black-legged members of the *urnaria* group are so extensively silvered. The dense, coarse punctation of the scutum and pleura, the largely red gaster of the female, and the broad, triangular form of the aedeagal spine (fig. 1) of the male are also distinctive features.

The general pattern of silver hair on the pleuron of *cybele* suggests a relationship with the Neotropical mainland species *picipes* Cameron, and the Nearctic *urnaria* Dahlbom and *kennedyi* (Murray), but the aedeagi of these three species are different from *cybele*.

According to Pastor Alayo, the area of Cuba in which *cybele* was collected, the south coast of Oriente Province between Santiago de Cuba and the eastern end of the island, is the driest part of Cuba.

Ammophila apicalis Guérin-Ménéville

Ammophilus apicalis Guérin-Ménéville, 1835. Iconographie due Règne Animal, Planches des Animaux-Invertébrés, pl. 70, fig. 3 (text is 1844, p. 435). Holotype male, Cuba (Museo Civico di Storia Naturale, Genoa).

Ammophila guerinii Dalla Torre, 1897. Cat. Hymenopterorum 8:400. New name for *apicalis*.

The nomenclature of this species has already been discussed (Menke, 1964), and I have since had an opportunity to examine the type in Genoa. *Ammophila apicalis* belongs in an assemblage here called the *nigricans* group. In addition to *apicalis*, it contains the following species: *centralis* Cameron, *cora* Cameron, *extremitata* Cresson, *feraldi* (Murray), *femurrubra* Fox, *gaumeri* Cameron, *mcclayi* Menke, *nigricans* Dahlbom, *pictipennis* Walsh, *placida* Smith, and *xanthoptera* Cameron. The *nigricans* group is restricted to North and Central America. The sculpture of the propodeal enclosure is the most distinctive feature of the group. The surface is dull, finely granulate in appearance, and usually has uniform, broadly spaced transverse ridging. In contrast, the propodeal enclosure of other

Ammophila groups is usually shiny, at least laterally, the ridging is much closer and stronger, and the ridges are usually interrupted mesad by coarse punctation or fine reticulation.

In the *nigricans* group the episternal sulcus is usually long, extending ventrad well beyond the pronotal lobe. In males of some species of the group it is sometimes evanescent or absent below the pronotal lobe (*apicalis*, *pictipennis*, *extremitata*, *placida*, *nigricans*, and both sexes of *cora*). Females of six species (*apicalis*, *cora*, *extremitata*, *femurrubra*, *pictipennis*, *placida*) usually have a minute tooth on the inner edge of the claw near the base. Claw teeth are found elsewhere in *Ammophila* only in the related Old World *fallax* group.

Ammophila apicalis is easily distinguished from *cybele* by its dull, sparsely punctate or impunctate thorax, amber wings, and black, erect body hair. The head, collar and pleura of *apicalis* are covered with appressed silver hair, but not so densely as in *cybele*; and the silvering of the pleura is more extensive, not bandlike as in *cybele*.

The North American species *pictipennis* is a very close relative of *apicalis*, and the former is separable only by the lack of appressed silver hair on the head and thorax. The male genitalia are the same. It may be that the two taxa are merely geographical races of one species. Some males of *pictipennis* from the southwestern part of the species range (Texas to Oaxaca, Mexico) have traces of appressed silver hair on the mesopleuron adjacent to the midcoxa. Mesopleural silvering has not been observed in *pictipennis* males from southern Florida, however.

Based on the material I have studied from various museums, *apicalis* appears to be generally distributed over Cuba. In the Museum of Comparative Zoology, Harvard University, there are specimens of *apicalis* that were collected by the Utowana Expedition at Clarence Town, Long Island in the Bahamas during February 1934. I recently received for identification an *apicalis* female collected by J. H. Frank in a sugar cane field on the island of Jamaica. These specimens do not differ from Cuban *apicalis*.

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